

## CLAIMS

1. A method for inspecting fat-soluble vitamins and/or fat-soluble food factors in a body, comprising analyzing fat-soluble vitamins and/or fat-soluble food factors in saliva.
2. A method for inspecting migration of fat-soluble vitamins and/or fat-soluble food factors contained in ingested health supplements, drugs or foods into a body, comprising analyzing fat-soluble vitamins and/or fat-soluble food factors in saliva.
3. The method according to claim 2, wherein the inspecting is conducted on the basis of concentrations of the fat-soluble vitamins and/or the fat-soluble food factors in saliva of subjects before ingestion of the health supplements, drugs or foods, or the mean concentrations of the fat-soluble vitamins and/or the fat-soluble food factors in saliva of a control group ingesting no health supplements, drugs or foods.
4. A method for inspecting effect or action of an administered therapeutic agent on biosynthesis and metabolism of fat-soluble vitamins and/or fat-soluble food factors, comprising analyzing fat-soluble vitamins and/or fat-soluble food factors in saliva as indicators.
5. The method according to claim 4, wherein the inspecting is conducted on the basis of concentrations of the fat-soluble vitamins and/or the fat-soluble food

factors in saliva of subjects before taking the therapeutic agent, or the mean concentrations of the fat-soluble vitamins and/or the fat-soluble food factors in saliva of a control group with no taken therapeutic agent.

6. A method for assessing suitability of ingestion or an intake of health supplements, drugs or foods comprising fat-soluble vitamins and/or fat-soluble food factors, wherein the method uses a method according to claim 2 or 3.

7. A method for assessing suitability of administration or a dosage of a therapeutic agent having effect or action on biosynthesis and metabolism of fat-soluble vitamins and/or the fat-soluble food factors, wherein the method uses a method according to claim 4 or 5.

8. The method according to any of claims 1 to 7, wherein saliva is parotid saliva

9. The method according to claim 8, wherein the parotid saliva is collected using a saliva collecting tool which collects parotid saliva selectively and quantitatively

10. The method according to claim 9, wherein the saliva collecting tool has (a) a collection part comprising an absorber for absorbing saliva irreversibly and (b) a quantification part for quantifying the amount of saliva collected to the absorber

11. The method according to claim 10, wherein the saliva collecting tool has further a storage container part for

holding a saliva preservative solution in which the absorber with the absorbed saliva is dipped to preserve.

12. The method according to claim 11, wherein the saliva preservative solution is a water-soluble organic solvent.

13. The method according to any of claims 1 to 12, comprising:

(a) a process for extracting the collected saliva, the absorber with the absorbed saliva, and/or the preservative solution with the preserved absorber with a water-soluble organic solvent, a hydrocarbon base organic solvent, or a mixture of isopropanol and ethyl acetate,

(b) a process for using the extract as an analysis sample to separate the fat-soluble vitamins and/or the fat-soluble food factors by high-performance liquid chromatography, and

(c) a process for detecting the separated fat-soluble vitamins and/or the fat-soluble food factors.

14. The method according to any of claims 1 to 13, wherein the fat-soluble vitamins and/or the fat-soluble food factors are at least one substance selected from a group consisting of CoQ10, lycopene,  $\beta$ -carotene and tocopherol.

15. A method for screening drugs or health supplements, wherein the method uses a method according to any of claims 1 to 14.